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Studebaker & Brackett PC 1890 Preston White Drive Suite 105 Reston, VA 20191			EXAMINER NEWLIN, TIMOTHY R	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/091,337

**Applicant(s)**

MIZUNO, YUSUKE

**Examiner**

Timothy R. Newlin

**Art Unit**

2623

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 2, 4-13, 15-26 and 29-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4-13, 15-26 and 29-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/06)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Arguments*

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-25, 27-30, 46-41, and 43-44 are rejected under 35 U.S.C. 103(a) as obvious over Russo, U.S. Patent No. 6,025,868 in view of Dunn, US 5,945,987.
2. Regarding claims 1, 2, and 43, Russo discloses a storage-type receiving device and method comprising:
  - a receiving part for receiving a content being transmitted **[tuner 104, Fig. 2; paras. 19, 29]** ;
  - a storage part for storing the content **[storage 110, Fig. 2; paras. 15, 32, 46]**;
  - a control part **[central controller 150, Fig. 2; para. 31]**; and

a restoring part for restoring the content received with the receiving part and/or the content stored in the storage part in accordance with control of the control part **[the compressor/decompressor 112 restores content from storage based on controller 150, Fig. 2; paras. 33, 34];**

Russo describes a previewing function, but does not "selectively" retrieve and store scenes **[system may make available different storage areas for program and preview information, and system determines whether content is a preview or pay-per-view and outputs/stores accordingly, paras 44-46]**. Hoffert teaches a previewing system wherein the control part at least controls the restoring part, and the control part comprises:

a storage control portion for judging whether or not each content is a pay-per-view content, for controlling the restoring part to select portions from the content received that are predetermined as previewable **[cols. 19-20, ll. 32-59; system determines whether content is seekable, whether a media preview is available, etc., cols. 25-26, ll. 4-58]** and to create a preview when the content is judged as a pay-per-view content and for selectively storing preview of a previewable pay-per-view content selected from the transmitted content in the storage part **[col. 8; content previews are stored, col. 7, 42-52; step 422, Fig. 4C];** and

a playback control portion which reads out the preview stored in the storage part and playback and outputs the preview **[step 423, Fig. 4C, step 432, Fig. 4D; cols. 19-20, ll. 53-11]**.

In addition to disclosing the various hardware elements as described above, Russo allows a user to select criteria for automatic recording, such as genre, cast, or other user preferences [paras. 1321, 40]. Russo also suggests the desirability of a preview function that allows users to preview content without incurring a charge. Given these functions of Russo, it would have been obvious to one of ordinary skill that Russo could be modified to take advantage of the more sophisticated metadata and preview creation taught by Hoffert. As Hoffert states, "it is desirable to not only search the lexical content surrounding a media file, but also to search the content of the media file itself." [col. 7, 60-64]. Using the previewing capability of Hoffert allows users to focus on the portions of a video they want to see, rather than wasting time and manual effort skimming through an entire full-length content.

3. Claim 4 recites the same substantive limitations as claim 1, all of which are addressed above. Russo discloses the added limitation of a computer program embodied on a computer readable medium **[central controller 150, Fig. 2; para. 31 alternatively, controller 10, Fig. 1, para. 17]**.

4. Regarding claim 5, Hoffert discloses a receiving device wherein the playback control portion selects and playbacks a desired preview out of a plurality of previews being stored in accordance with a command for playback the preview from a user **[user can select particular previews from a filmstrip, Figs. 4A and 4B, col. 23, 2-25]**.

5. Regarding claim 6, Hoffert discloses a receiving device wherein the control part conducts one of recording information for specifying the preview selected by the playback command provided by the user and outputting such information to outside thereof **[cols. 22-23, ll. 65-25]**.

6. Regarding claim 7, Hoffert discloses a receiving device wherein the playback control portion selects and playbacks a desired preview out of a plurality of previews being stored while the control part performs control in response to another command differ from the playback command **[user clicks to begin playback of desired clip, while results are returned from server based on search command, col. 23, 8-25]**.

7. Regarding claim 8, Hoffert discloses a receiving device wherein the command differ from the playback command is a command for displaying a program table created in accordance with a category search, and wherein the playback control portion selects and searches a preview belonging to the category to be searched as a desired preview under the different command **[user can execute category search, e.g. talk show or action film, col. 8]**.

8. Regarding claim 10, Hoffert discloses a receiving device wherein the control part controls the restoring part so that the restoring part previously reads out part of each content in a plurality of contents alone as a preview and outputs the preview to the

storage part in parallel to a process for restoring a signal from the receiving part into a content with the restoring part and output it to the storing part **[cols. 22-23, ll. 65-25]**.

9. Regarding claim 11, Hoffert discloses a device wherein the storage control portion controls so that only a preview in a content, which complies with a condition for storing the preview specified by a user is output to the storage part **[previews are stored based on condition specified by user, col. 19-20, ll. 53-8]**.

10. Regarding claim 12, Hoffert discloses a device wherein the storage control portion conducts one of recording a condition for storing the preview provided by the user and outputting the condition to outside thereof **[col. 8; cols. 19-20, ll. 53-8]**

11. Regarding claim 13, Hoffert discloses a device wherein the condition for storing the content is a specific category of content **[col. 8]**.

12. Regarding claim 15, Russo discloses a device wherein the control part performs the following steps when a command for subscribing a specific pay-per-view content from a user is received;

detecting at when the subscription command is received whether or not a lapsed time from the beginning of the pay-per-view content which is received and output with the receiving part is longer than a time period for playback of preview of the pay-per-view content stored in the storage part **[para. 44]**, and

storing the pay-per-view content into a temporary storage part capable of storing a content having a longer playback period than the lapsed time and playback, and playback the pay-per-view content stored in the temporary storage part while playback the preview stored in the storage part when the time period for playback is longer than the elapsed time **[both the preview period and the content itself is played back from storage, paras. 44-46].**

13. Regarding claim 16, Russo discloses a device wherein the control part performs the following steps when a command for subscribing a specific pay-per-view content from a user who views preview of the pay-per-view content is received;

detecting at when the subscription command is received whether or not the pay-per-view content is currently transmitted in accordance with information on programs received **[paras. 42, 44],**

storing the subscription command of the pay-per-view content when no transmission is currently conducted, and determining whether or not the pay-per-view content corresponding to the stored subscription command is in an on-air schedule whenever information on programs are updated, and outputting a display which shows that the pay-per-view content will be on-aired when the pay-per-view content is in the schedule **[controller utilizes future schedule information and determines whether content is available for download or preview, para 40].**



14. Regarding claim 17, Russo discloses a device, the device further comprising a communication part for communicating with a content provider's device via a communication line **[tuner 104, Fig. 2]**, wherein the control part performs the following steps when a command for subscribing a specific pay-per-view content from a user who views preview of the pay-per-view content is received;

detecting at when the subscription command is received whether or not the pay-per-view content is currently transmitted in accordance with information on programs received **[paras. 42, 44]**, and

transmitting by communication part the subscription command of the pay-per-view content to the content provider's device when no transmission is currently conducted **[transmission device receives subscription commands, para. 42, 43]**;

15. Regarding claim 18, Russo discloses a device wherein the control part outputs an indication by which a content of its previews being stored in the storage part can be distinguished from other contents during restoration of information on programs which is received **[controller distinguishes between pay-per-view and preview contents, paras. 44, 46; supplemental information is also distinguished, para. 37]**.

16. Regarding claims 19 and 20, Russo discloses a device wherein the storage control portion deletes a preview stored in the storage part in order of longer duration of storing to store a new preview when the new preview can not be stored in the storage

part **[stored content may be deleted to free up space, para. 45; also see para. 21 for controller storage management and erasure]**.

17. Regarding claim 21, Russo discloses a device wherein the storage control portion deletes a preview which has been playback to store a new preview when the new preview can not be stored in the storage part **[stored content may be deleted to free up space, para. 45; also see para. 21 for controller storage management and erasure]**.

18. Regarding claim 22, Russo discloses a device wherein the storage control portion deletes a preview corresponding to a content which has been playback according to a command from a user to store a new preview when the new preview can not be stored in the storage part **[stored content may be deleted to free up space, para. 45; also see para. 21 for controller storage management and erasure]**.

19. Regarding claim 23, Russo discloses a device wherein the control part judges whether or not a content corresponding to a preview can currently be received while the preview stored is playback, and stores the content in a temporary basis when the content can be received **[controller 10 performs storage management and provides for the periodic erasure of programs, para. 21]**.

20. Regarding claim 24, Russo discloses a device wherein the control part compensates a missing part of a content currently received with the content temporary stored when a subscription command for the content corresponding to the preview is received while the preview stored is playback **[system keeps track of exactly where operator left off (paras. 25, 45) and may store and play programs or parts of programs automatically based on what has been previously viewed (para. 40)]**.

21. Regarding claim 25, Russo discloses a device wherein the control part compensates the missing part of the content currently received further using the stored preview **[system keeps track of exactly where operator left off (paras. 25, 45) and may store and play programs or parts of programs automatically based on what has been previously viewed (para. 40)]**.

22. Regarding claim 29, Russo discloses a device wherein the storage control portion judges whether or not the content is a pre-viewable pay-per-view content in accordance both of description of received ECM and a fact that a valid key is send back as a result of transmitting the ECM to a key reproduction part **[system transmit and receive supplemental storage information, including authorization keys, para. 37]**.

23. Regarding claim 30, Hoffert discloses a device wherein the storage control portion creates a list in which pay-per-view contents that are pre-viewable are listed,

and stores the preview of the pre-viewable pay-per-view contents in accordance with the list **[cols. 7-8]**.

24. Regarding claim 36, Russo discloses a receiving device capable of viewing a part of a content as a preview, the device comprising:

a control part conducts one of recording history of viewing the previews and of viewing the content, and outputting the history to outside thereof. **[system will list pre-recorded contents and viewing history, para. 25; user may review titles of stored content, para. 44; selection history is outputted to program provider, para. 44]**.

25. Regarding claim 37, Hoffert discloses a receiving device which receives and stores a content being transmitted, and restores the stored content and outputs the restored content, the device comprising a control part which controls so that one of recording a condition for storing the preview specified by a user and outputting such a condition to outside thereof is conducted while selectively storing a preview having a condition comply with a condition provided by a user **[content is searched based on user criteria, while previews are generated and stored, cols. 19-20]**.

26. Regarding claim 38, Russo discloses a device according to claim 37, wherein the control part further controls so that history of command for viewing the stored preview provided by the user is one of recorded and output to outside thereof **[system will list pre-recorded contents and viewing history, para. 25; user may review titles of**

**stored content, para. 44; selection history is outputted to program provider, para. 44].**

27. Regarding claim 39, Russo discloses a device according to claim 37, wherein the control part further controls so that either a command for storing the stored content or the history of command for viewing the stored preview provided by the user is one of recorded and output to outside thereof **[system will list pre-recorded contents and viewing history, para. 25; user may review titles of stored content, para. 44; selection history is outputted to program provider, para. 44].**

28. Regarding claim 40, Russo discloses a device according to claim 36, wherein the control part transmits to a transmit device either the history or the condition both once stored **[system will list pre-recorded contents and viewing history, para. 25; user may review titles of stored content, para. 44; selection history is outputted to program provider, para. 44].**

29. Regarding claim 41, Hoffert discloses a method of displaying an electronic program guide on a receiving device, the method comprising a step of indicating a display by which a program is pre-viewable to each of pay programs **[col. 23, 1-25; col. 24, 1-13].**

30. Regarding claim 44, Russo discloses a method for managing content broadcasting, the method comprising the steps of:

at a receiving device **[tuner 104, Fig. 2; paras. 19, 29];**

previously storing transmitted by a transmission device into preview of a content, by judging whether or not each content is a pay-per-view content, and controlling to previously read out a part of each content in a plurality of contents alone as a preview when the content is judged as a pay-per-view content **[system determines whether content is pay-per-view and outputs/stores accordingly, paras 44-46]** and to store the preview **[program content previously stored, para. 44],**

determining whether or not a pay-per-view content is currently airing in accordance with information on programs when a user provides a command for subscription according to the stored preview **[paras. 40, 42, 44],** and

transmitting to the transmission device the subscription command of the pay-per-view content when the content is not on-aired, at the transmission device **[transmission device receives subscription commands, para. 42, 43];**

receiving commands for subscription from a plurality of receiving devices **[groups of subscribers, para. 20],** and

determining whether or not rerun of the pre-per-view content is carried out according to the number of the subscription commands **[content may be repeated or controlled based on subscriber commands, paras. 26, 45].**

Russo describes a previewing function, but does not "selectively" retrieve and store scenes **[system may make available different storage areas for program and preview information, and system determines whether content is a preview or pay-per-view and outputs/stores accordingly, paras 44-46]**. Hoffert teaches a previewing system wherein the control part at least controls the restoring part, and the control part comprises:

a storage control portion for judging whether or not each content is a pay-per-view content, for controlling the restoring part to select portions from the content received that are predetermined as previewable **[cols. 19-20, II. 32-59; system determines whether content is seekable, whether a media preview is available, etc., cols. 25-26, II. 4-58]** and to create a preview when the content is judged as a pay-per-view content and for selectively storing preview of a previewable pay-per-view content selected from the transmitted content in the storage part **[col. 8; content previews are stored, col. 7, 42-52; step 422, Fig. 4C]**; and

a playback control portion which reads out the preview stored in the storage part and playback and outputs the preview **[step 423, Fig. 4C, step 432, Fig. 4D; cols. 19-20, II. 53-11]**.

In addition to disclosing the various hardware elements as described above, Russo allows a user to select criteria for automatic recording, such as genre, cast, or other user preferences **[paras. 1321, 40]**. Russo also suggests the desirability of a preview function that allows users to preview content without incurring a charge. Given

these functions of Russo, it would have been obvious to one of ordinary skill that Russo could be modified to take advantage of the more sophisticated metadata and preview creation taught by Hoffert. As Hoffert states, "it is desirable to not only search the lexical content surrounding a media file, but also to search the content of the media file itself." [col. 7, 60-64]. Using the previewing capability of Hoffert allows users to focus on the portions of a video they want to see, rather than wasting time and manual effort skimming through an entire full-length content.

Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Russo and Hoffert in view of Yurt et al., U.S. Patent No. 5,132,992. Russo shows compression and decompression but does not explicitly show the use of a buffer. Yurt does teach a buffering process that includes a combination of buffering and non-buffering that compensates for real-time or later viewing [cols. 4-5, 64-9]. Yurt also describes realigning video data and user addressing of particular content portions [col. 8, 20-23]. Moreover, Russo suggests that well-known memory technology may be used to facilitate electronic transmission of data [para. 32]. Therefore it would have been obvious to one of ordinary skill in the art to use a buffer as part of the compression, storage, and playback system of Russo in order to match data rates between system components.

31. Claims 31-35 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russo and Hoffert as cited above.



32. Regarding claims 31, 35, and 42, neither Russo nor Hoffert explicitly discloses a display of available capacity for storage. However, Russo strongly suggests the possibility, stating that the user "energizes the apparatus and an accompanying television or monitor, and uses the remote...to review those programs previously recorded onto the high-capacity medium" **[para. 44]**. Thus, given that the user can view a database of currently stored programs, it would have been obvious to one skilled in the art to include the total or current available capacity on the display, so the user may decide to download more content, erase content, or some combination thereof. Generally speaking, it is advantageous to display as much basic information to the user as possible.

33. With respect to claim 35, it has an additional limitation of storing a summarized form of content based on memory capacity. Russo discloses controller 10 which performs storage management, including keeping track of what has been stored and deleting content to maintain memory space. **[paras. 21 and 45]**. At the point where content currently being downloaded exceeds the available memory, the content will exist in a summarized (i.e. incomplete) form.

34. Regarding claim 32, Russo discloses a device according to claim 31, wherein the storage control portion previously records the capacity of each content during storage of the content, and acquires the capacity of each content in accordance with description of

the record **[content may be automatically erased based on current memory capacity, para. 45]**.

35. Regarding claim 33, Russo discloses a device wherein the storage control portion outputs another content capable of being stored as a candidate for storage in accordance with capacity of each of the content when it is judged that storage for the content to be stored accompanies a trouble **[controller 10 performs storage management, including keeping track of what has been stored and deleting content to maintain memory space, paras. 21 and 45]**.

36. Regarding claim 34, Russo does not specifically teach choosing a compression rate based on storage availability. However, Russo does teach that the compression may advantageously be provided to most efficiently utilize the storage unit 110, and also that compression algorithms may be programmable and updated as necessary **[para. 33]**. Thus, given Russo's suggestion that compression may be adjusted, it would have been obvious to one of ordinary skill to adjust compression rates when memory capacity varies, in order to in order to balance between complex compression (which is processor- and bandwidth-intensive) and available memory space.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy R. Newlin whose telephone number is (571) 270-3015. The examiner can normally be reached on M-F, 8-5 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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TRN